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Determination of the antioxidant capacity of sample

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ABSTRACT:

CHG DATE=19990702 STATUS=O>The antioxidant capacity of samples is determined

by measuring the optical variation of the samples which are heated in the presence of a system which forms temperature dependent free radicals and an indicator which changes its optical properties according to the free radicals formed. The measurement is effected in a new analytical device. The antioxidant capacity of samples is determined by: a) mixing the sample in a plurality of cooled wells arranged in a given x-y frame with a system which forms temperature-dependent free radicals and an indicator which changes its optical properties depending on radicals present; b) bringing the mixture to an initial temperature of 0-20 deg C; c) heating the mixture to a maximum of 90 deg C, preferably over 60 minutes, while continuously recording the change in the optical properties using a conventional reading device; and d) determining the antioxidant capacity by comparing the change with known reference values. An Independent claim is also included for an analytical device comprising a known microtitre plate having flexible wells arranged in an x-y frame and a metallic temperature controllable base having corresponding depressions to receive the wells.